

OIL AND GAS RESOURCES

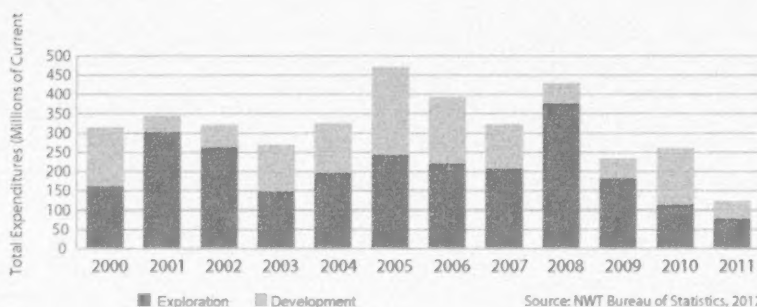
2012

The development of petroleum resources in the NWT compliments oil sands production and shale gas developments in Western Canada, enhancing Canada's position as a secure source of energy supply.

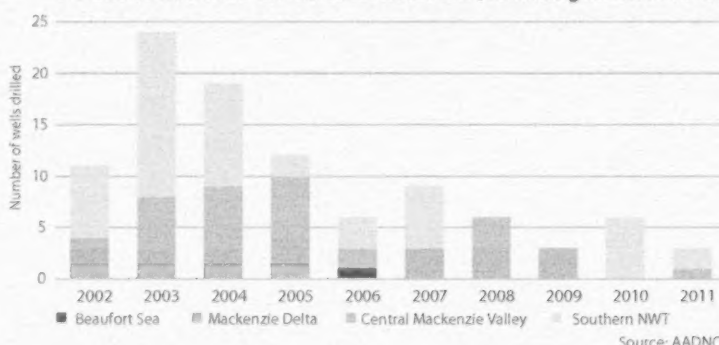
The Beaufort-Mackenzie Basin is known to be particularly rich in oil and gas, with 59 discoveries to date. Low natural gas prices have adversely affected the development of the Mackenzie Gas Project. NWT communities and businesses are seeking alternative ways to tap into these tremendous resources.

Oil and gas exploration has a long history in the NWT, dating back to the Norman Wells oil discovery, drilled in 1920. Exploration initially increased in the southern NWT in the late 1940s and 1950s. During the 1970's and 80's the federal government offered significant incentives to companies engaging in northern energy resource exploration, motivated by the oil price shock of 1974 and concerns for domestic supply. The Norman Wells oil field, in the central Mackenzie Valley, was expanded and a pipeline constructed from Norman Wells to northern Alberta in the mid-1980s.

Oil and Gas Exploration and Development Expenditures 2000-2011



Total Number of Wells drilled (excluding Norman Wells drilling)



Key Facts

- One new exploratory well was drilled in the Central Mackenzie Valley and two new development wells were drilled in the Southern NWT in 2011. In addition, 17 wells previously drilled were re-entered for work-over, re-completion or abandonment.
- Total aggregate oil production in 2011 was 3.8 million barrels, a 30% decline from 2010, largely due to the temporary shutdown of the Rainbow pipeline in Alberta.

Energy Facts

- In 2011-2012, 8 exploration licences – two in Central Mackenzie Valley and 6 in the Beaufort Sea Mackenzie Delta – were awarded against work expenditure bids totaling over \$99 million.¹
- Total aggregate natural gas production in 2011 was 5.8 billion cubic feet, an 8% decrease from the previous year.

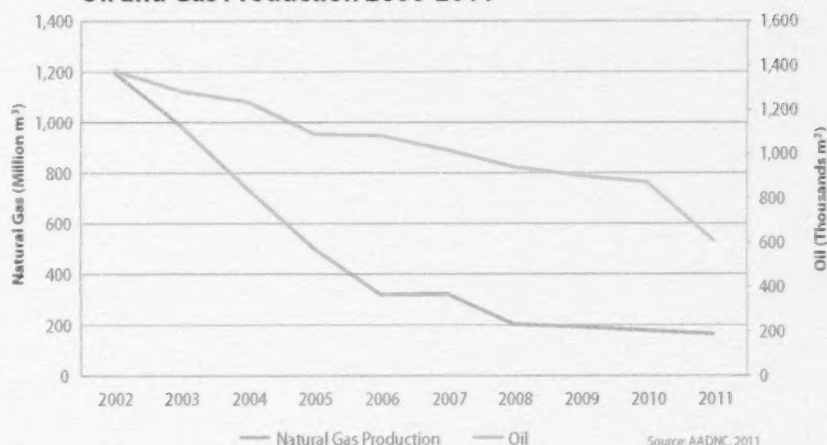
Oil and Gas Production Activity and Reserves

- There are three currently producing oil and gas fields in the NWT. These include:

- The Norman Wells oil field in the central Mackenzie Valley has been in production since 1943 and is Imperial Oil's largest single conventional oil field. As of December 2011, the field had produced a cumulative total of 265 million barrels of oil over 21 years of production.² The Ikhil field is operated by AltaGas Ltd. and, as of December 2011, had produced a cumulative total of 6.9 billion cubic feet of natural gas over 13 years of production. Gas from Ikhil field is delivered through a 50 km pipeline to Inuvik. The Ikhil field will be phased out of production in the next few years as the reserves are diminishing.

- Paramount's Cameron Hills interest has four fields piped to the Bistcho region of northern Alberta. As of December 2011, the field had produced cumulative totals of 30.8 billion cubic feet of natural gas and 2.4 million barrels of oil over 10 years of production.

Oil and Gas Production 2000-2011



Region	Discovered Recoverable Resources		Ultimate Recoverable Potential	
	Oil (Million Barrels)	Natural Gas (Billion Cubic Feet)	Oil (Million Barrels)	Natural Gas (Billion Cubic Feet)
Arctic Islands	12	3,720	1,206	22,712
Beaufort Sea	616	4,705	3,854	23,832
Mackenzie Delta	248	6,282	1,211	21,983
Mainland	306	1,535	604	12,639
Total	1,182	16,242	6,874	81,166

Source: INAC, NORTHERN CANADA DISTRIBUTION OF ULTIMATE OIL AND GAS RESOURCES, March 2009

¹ <http://www.aadnc-aandc.gc.ca/>; calls for bids 2011-2012 Central Mackenzie Valley, and 2011-2012 Beaufort Sea and Mackenzie Delta

² Northern Oil and Gas Annual Report 2011, p.21

